

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1, 4, 8, 10, 11 and 13-16 and the specification are amended. Claims 1-8, 10, 11 and 13-27 are pending.

The Applicants are appreciative of the indication by the Examiner, in the Examiner Interview conducted February 26, 2008, that Ton does not appear to disclose "transmitting a binding update (BU) message, containing an identifier that indicates whether there is a request for slave home agent information, directly to a master home agent from a mobile node," and that the amendments to the claims would require new search and/or consideration.

Entry of Amendment under 37 C.F.R. § 1.116

The Applicant requests entry of this Rule 116 Response because: the amendments were not earlier presented because the Applicant believed in good faith that the cited references did not disclose the present invention as previously claimed; and the amendment does not significantly alter the scope of the claim and places the application at least into a better form for purposes of appeal.

The Manual of Patent Examining Procedures (M.P.E.P.) sets forth in Section 714.12 that "any amendment that would place the case either in condition for allowance or in better form for appeal may be entered." Moreover, Section 714.13 sets forth that "the Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The M.P.E.P. further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

I. Rejection under 35 U.S.C. § 112

In the Office Action, at page 2, numbered paragraph 3, claims 8, 10, 11 and 13 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 8, 10, 11 and 13 are amended in light of the Examiner's comments, and accordingly, withdrawal of the § 112, first paragraph, rejection is respectfully requested.

II. Rejection under 35 U.S.C. § 101

In the Office Action, at page 2, numbered paragraph 4, claims 8-13 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claims 8, 10, 11 and 13 and the specification are amended in light of the Examiner's comments, and accordingly, withdrawal of the § 101 rejection is respectfully requested.

III. Rejection under 35 U.S.C. § 102

In the Office Action, at page 5, numbered paragraph 6, claims 1-3 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Publication No. 2002/0067704 to Ton. This rejection is respectfully traversed because Ton does not discuss or suggest:

transmitting a binding update (BU) message, containing an identifier that indicates whether there is a request for slave home agent information, directly to a master home agent from a mobile node, in a mobile IPv6 environment,

wherein the slave home agent information is information on a slave home agent that neighbors the master home agent,

as recited in amended independent claim 1.

In the present invention, a binding update message and a binding acknowledgement message are transmitted between a mobile node and a master home agent directly.

Ton discusses only that the mobile node sends an RRP to a home agent through a foreign agent FA. The foreign agent sends the registration request RRP to the home agent HA1. Ton does not discuss or suggest that the mobile node MN sends transmits a binding update message directly to a master home agent. The registration request in Ton is transmitted directly to the foreign agent FA from the mobile node MN, but is not transmitted directly to the home agent HA1 from the mobile node MN.

The difference in transmission techniques is due to the fact at the present invention is applied to IPv6, while Ton is applied to mobile IP.

Further, Ton does not discuss or suggest that the registration request that the mobile node MN transmits contains an identifier that indicates whether there is a request for slave home agent information. The Examiner alleges that the mobile node sends a Mobile IP RRQ with an indicator inherent in the Mobile IP message format "A", which indicates whether or not the sender of the message desires an acknowledgement or not. The Examiner further alleges that the acknowledgment includes alternate HA addresses and thus the desire to receive an acknowledgement is also the desire to receive slave home agent information. The Applicants respectfully disagree. Further, the Applicants respectfully request that the Examiner provides more specific evidence to assert that the IP RRQ message in Ton comprises information on requesting slave home agent information.

Ton discusses only that the Mobile IP RRQ is sent with the statically configured primary HA, and HA1 address, and that the FA forwards the Mobile IP RRQ to HA1, which, if it accepts the Mobile IP RRQ, will add a new mobility binding, establish a tunnel 450 between the FA and HA and send 430 the Mobile IP RRP, which will now include the new Mobile IP Alternate HA extension containing alternate HA IP addresses, here with the IP address of HA2. While Ton does suggest that the Mobile IP RRP includes a new Mobile IP Alternate HA extension containing alternate HA IP addresses, including with the IP address of HA2, Ton does not suggest that the Mobile IP RRQ specifically includes an identifier that indicates whether the mobile node MN has requested slave home agent information.

Ton specifically recites that, once the HA1 receives the forwarded Mobile IP RRQ, the HA1 will look in its local HA load information table to find a HA where the load is less than its own, and if it finds one that is less busy then it will return a Mobile IP RRP with an error code 130 including a new Mobile IP extension, or alternately using error code 136 including the address of the second Home Agent HA2 (paragraph 0045). Thus, the HA1 only adds the address of the second Home Agent HA2 if the HA1 determines that a HA has a load less than its own. Ton, thus, does not specifically discuss nor does Ton suggest that the Mobile RRQ that was sent from the mobile node MN contains an identifier that indicates whether there is a request for slave home agent information.

The Examiner alleges that the acknowledgement from HA1 includes alternate HA addresses (i.e. slave home agent information), thus the desire to receive an acknowledgement is also the desire to receive slave home agent information. The Applicants respectfully disagree with the Examiner's assertion and implied assertion of inherency as to the Mobile RRQ including an identifier that indicates whether there is a request for slave home agent information. First, the mere receipt of an alternate HA address does not necessarily imply that the Registration Request sent from the Mobile Node MN includes an identifier that indicates whether there is a request for slave home agent information. Ton does not specify that the Mobile RRP includes an identifier or that an identifier indicating whether there is a request for slave home agent information is necessary for HA1 to send a Mobile IP RRP including the address of the HA2.

Further, M.P.E.P. § 2112 requires that to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. In relying upon the theory of inherency,

the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.

Here, the Examiner implicitly implies that it is inherent that the Mobile RRQ includes an identifier that indicates whether there is a request for slave home agent information. Therefore, the Applicants respectfully request that the Examiner provide a basis in fact and/or technical reasoning to reasonably support the determination that the Mobile RRQ must inherently include an identifier indicating whether there is a request for slave home agent information. More specific information is needed in order to establish that the Mobile RRQ inherently includes an identifier indicating whether there is a request for slave home agent information.

Therefore, as Ton does not discuss or suggest "transmitting a binding update (BU) message, containing an identifier that indicates whether there is a request for slave home agent information, directly to a master home agent from a mobile node, in a mobile IPv6 environment, wherein the slave home agent information is information on a slave home agent that neighbors the master home agent," as recited in amended independent claim 1, claim 1 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Further, Ton does not discuss or suggest "transmitting a binding acknowledgement (BACK) message, after receiving a binding update (BU) message containing an identifier that indicates whether there is a request for slave home agent information, containing slave home agent information, directly to a mobile node from a master home agent, in a mobile IPv6 environment," as recited in amended independent claim 4. Therefore, claim 4 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Also, Ton does not discuss or suggest "the processor transmitting a binding update (BU) message in a mobile IPv6 environment from a mobile node directly to a master home agent, containing an identifier that indicates whether there is a request for slave home agent information, wherein the slave home agent information is information on a slave home agent that neighbors a master home agent that receives the BU message," as recited in amended independent claim 8. Therefore, claim 8 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Additionally, Ton does not discuss or suggest "the processor transmitting a binding acknowledgement (BACK) message in a mobile IPv6 environment directly to a mobile node from

a master home agent, the BACK message containing slave home agent information being transmitted after receiving a binding update (BU) message containing an identifier that indicates whether there is a request for slave home agent information,” as recited in amended independent claim 10. Therefore, claim 10 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Also, Ton does not discuss or suggest “a BU message transmission unit that transmits a BU message, containing an identifier that indicates whether there is a request for slave home agent information, directly to a master home agent; a binding acknowledgement (BACK) message reception unit that receives a BACK message, containing the slave home agent information, directly from the master home agent; and a slave home agent information storing unit that stores the slave home agent information contained in the BACK message, wherein if the BACK message has not been received directly from the master home agent at a predetermined moment of time, the BU message transmission unit transmits the BU message to a new master home agent using the slave home agent information stored in the slave home agent information storing unit,” as recited in amended independent claim 14. Therefore, claim 14 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the §102(b) rejection is respectfully requested.

Further, Ton does not discuss or suggest “a BU message reception unit that receives a BU message, containing an identifier that indicates whether there is a request for slave home agent information, directly from a mobile node; a slave home agent information transmission determination unit that determines whether to transmit the slave home agent information, requested by the mobile node, directly to the mobile node; a binding acknowledgement (BACK) message generation unit which generates a BACK message, containing the slave home agent information, if the slave home agent information transmission determination unit determines to transmit the slave home agent information, and generates an ordinary BACK message if the slave home agent information transmission determination unit determines not to transmit the slave home agent information; and a BACK message transmission unit that transmits the BACK message created by the BACK message generation unit to the mobile node,” as recited in amended independent claim 15. Therefore, claim 15 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

In addition, Ton does not discuss or suggest “inserting a slave home agent address information request into a first binding update (BU) message; and transmitting the first BU

message directly to a master home agent from a mobile node," as recited in amended independent claim 16. Therefore, claim 16 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Claims 2, 3, 5-7, 11, 13 and 17-24 depend either directly or indirectly from independent claims 1, 4, 8, 10 and 16 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 5 recites that "the slave home agent information comprises: an identifier that indicates whether the slave home agent information will be transmitted; ~~the~~a number of slave home agents; and at least one slave home agent address." Therefore, claims 2, 3, 5-7, 9, 11-13 and 17-24 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

IV. Rejection under 35 U.S.C. § 103

In the Office Action, at page 15, numbered paragraph 14, claims 25-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ton as applied to claims 16 and 20-23 above, and further in view of Ton. This rejection is respectfully traversed.

As discussed above with respect to independent claim 16, Ton does not discuss or suggest "inserting a slave home agent address information request into a first binding update (BU) message". Claims 25-27 depend either directly or indirectly from independent claim 16 and include all the features of claim 16, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 25 recites that "the BACK message further comprises a home agent address field to indicate addresses of the candidate slave home agents, which are arranged in a predetermined order according to corresponding priority levels." Therefore, claims 25-27 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Conclusion

In accordance with the foregoing, claims 1, 4, 8, 10, 11 and 13-16 have been amended. Claims 1-8, 10, 11 and 13-27 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.


Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 2/26/08

By: 
Kari P. Footland
Registration No. 55,187

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501